

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (canceled).

5. (New) A radar sensor utilizing the pulse-echo principle, comprising:

a first receiving antenna having a broad short-range antenna characteristic;

a second receiving antenna having a narrow long-range antenna characteristic; and

a switch coupled to the first and second receiving antennas, wherein the switch alternately transmits a received signal of the first receiving antennas and a received signal of the second receiving antenna by switching between the first and second receiving antennas at a pulse repetition frequency of radar pulses transmitted by a transmitting antenna.

6. (New) The radar sensor as recited in Claim 5, wherein the switching takes place only within a scanning distance range corresponding to the short-range antenna characteristic.

7. (New) A radar system, comprising:

at least two radar sensors, each radar sensor including:

a first receiving antenna having a broad short-range antenna characteristic;

a second receiving antenna having a narrow long-range antenna characteristic; and

a switch coupled to the first and second receiving antennas, wherein the switch alternately transmits a received signal of the first receiving antennas and a received signal of the second receiving antenna by switching between the first and second receiving antennas at a pulse repetition frequency of radar pulses transmitted by a transmitting antenna;

wherein a target angle determination is achieved in the short range by superimposing the short-range and long-range antenna characteristics of one radar sensor according to the mono-pulse method, and wherein a target angle determination is achieved in the long range by triangulation using the at least two radar sensors.

8. (New) A radar system, comprising:

at least two radar sensors, each radar sensor including:

a first receiving antenna having a broad short-range antenna characteristic;

a second receiving antenna having a narrow long-range antenna characteristic; and

a switch coupled to the first and second receiving antennas, wherein the switch alternately transmits a received signal of the first receiving antennas and a received signal of the second receiving antenna by switching between the first and second receiving antennas at a pulse repetition frequency of radar pulses transmitted by a transmitting antenna, and wherein the switching takes place only within a scanning distance range corresponding to the short-range antenna characteristic;

wherein a target angle determination is achieved in the short range by superimposing the short-range and long-range antenna characteristics of one radar sensor according to the mono-pulse method, and wherein a target angle determination is achieved in the long range by triangulation using the at least two radar sensors.

9. (New) The radar system as recited in Claim 7, wherein a calibration of the at least two radar sensors is achieved by obtaining redundant information in areas where the first antenna of a first sensor, the second antenna of the first sensor, the first antenna of a second sensor, and the second antenna of the second sensor overlap.

10. (New) The radar system as recited in Claim 8, wherein a calibration of the at least two radar sensors is achieved by obtaining redundant information in areas where the first antenna of a first sensor, the second antenna of the first sensor, the first antenna of a second sensor, and the second antenna of the second sensor overlap.